The University of Texas at Dallas
Hearing Protection Safety Manual
HEARING PROTECTION MANUAL

I. PURPOSE

This section is to be a guide for protection from hearing loss. Protection of hearing in industrial noise can be accomplished through control of noise exposure and through the use of hearing protection devices.

II. PROTECTIVE EAR EQUIPMENT

If engineering and administrative controls are not possible, then proper protective hearing protection shall be provided.

Since the principal entrance for sound pressure on the eardrum is through the external ear canal, blocking the passage of sound waves to the eardrum provides an effective method of reducing the sound pressure reaching the inner ear.

Two types of ear protection are ear plugs and ear muffs.

A. Ear Plugs

1. Properly fitted ear plugs can provide noise attenuation on the order of 30 decibels (dB) over a specific frequency band. It is important to match the frequency band of the ear plug to the noise hazard.

2. Ear plugs are effective only if properly seated. Instruct the employees to insert the plugs by teaching them to pull the ear up and back.

3. Ear plugs must be reseated from time to time during the course of the work day since normal body movement (chewing, yawning, talking) will cause them to work loose.

4. Inserting ear plugs will not damage the ear nor will wearing them damage the ear canal or ear drum if both are done according to instructions.

5. If ear plugs do not fit tightly, they will not provide protection. Ear plugs may be uncomfortable for a few days, but like anything new, employees will eventually get used to them.

6. Ear plugs should be washed in soapy warm water every three to four days. The danger of irritation to the skin lining the ear canal arises from poor hygiene.

7. Ear plugs may become hard, or shrink; all employees wearing ear plugs should be instructed to report to the supervisor when this occurs and to make arrangements to obtain a new pair.

8. Dry cotton does not provide any ear protection.
Employees must be told they are required to wear ear protection in hazardous conditions.